

FIG. 1

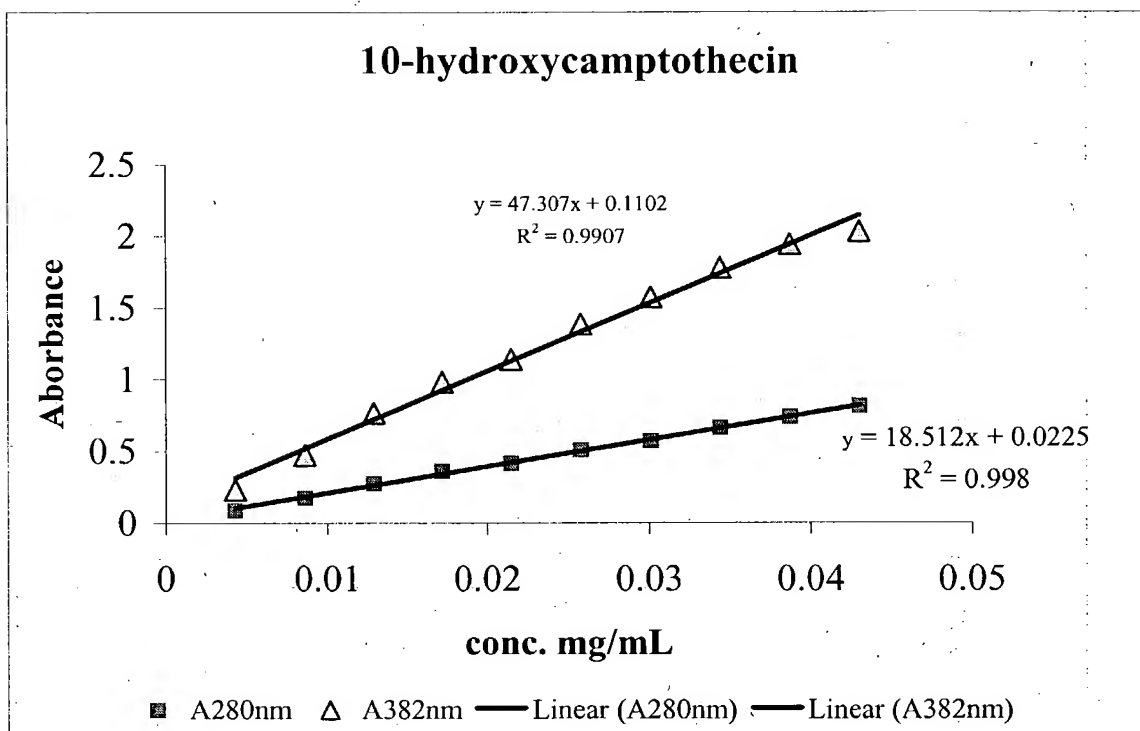


FIG. 2

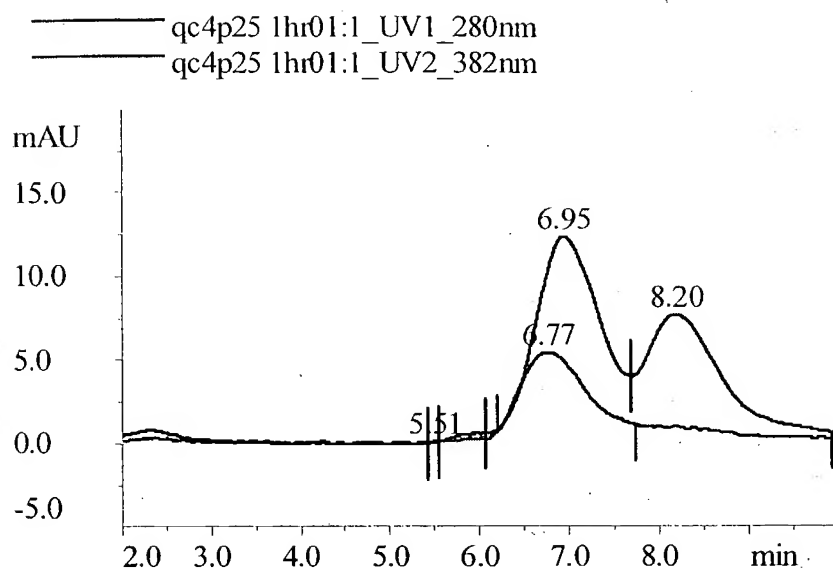


FIG. 3

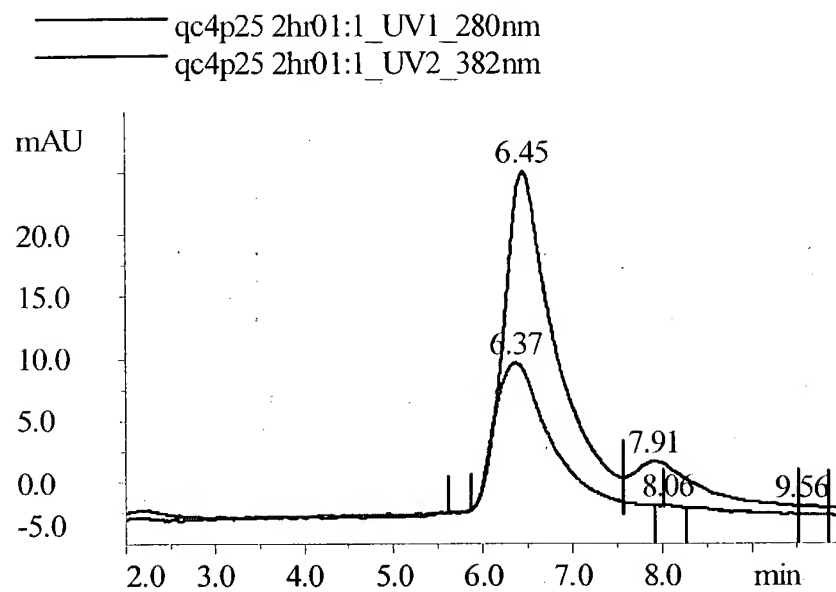


FIG. 4

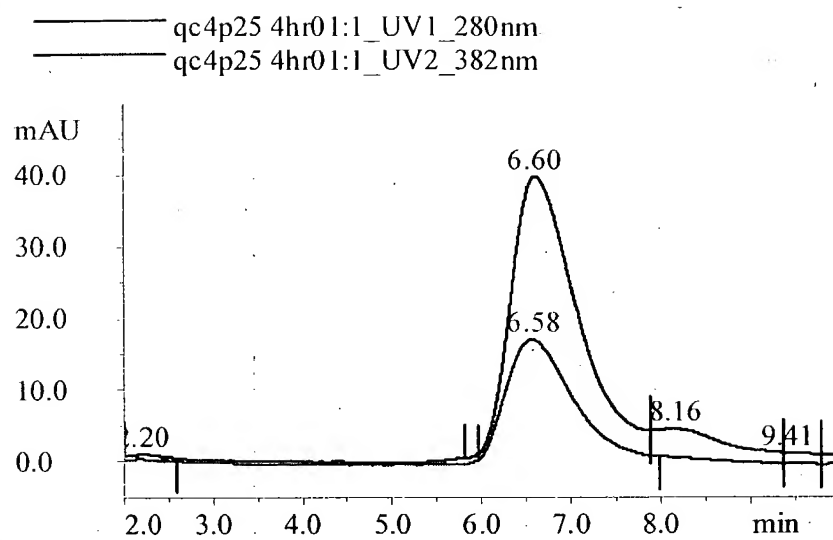


FIG. 5

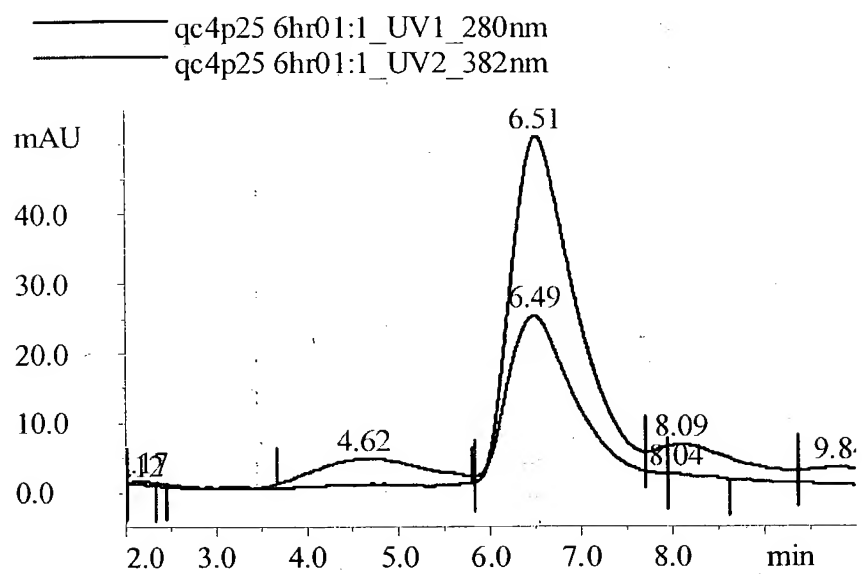


FIG. 6

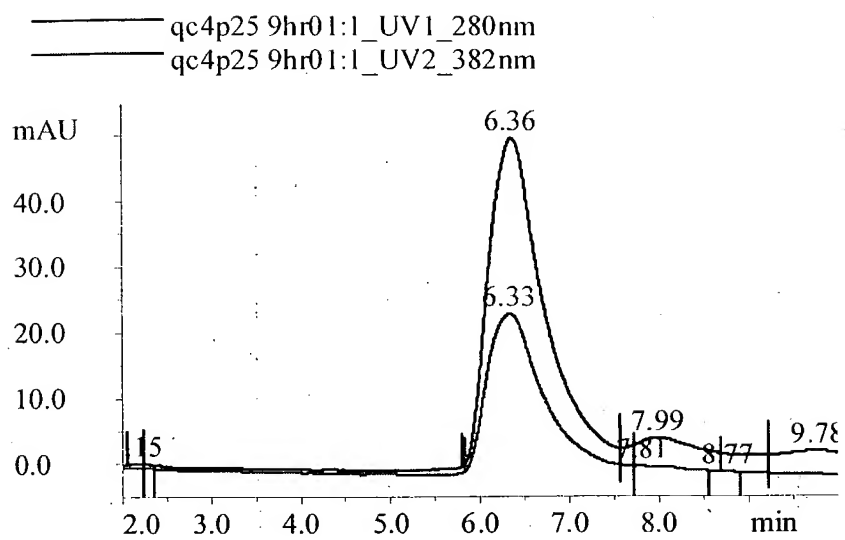


FIG. 7

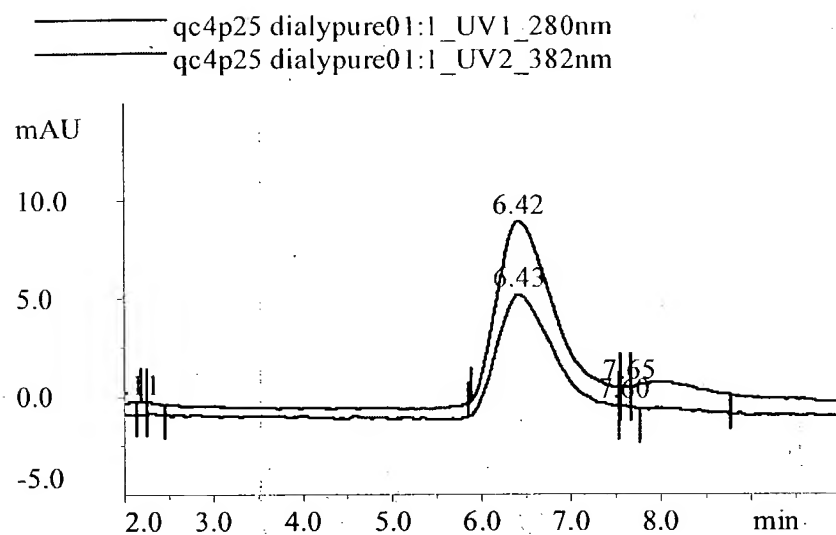


FIG. 8

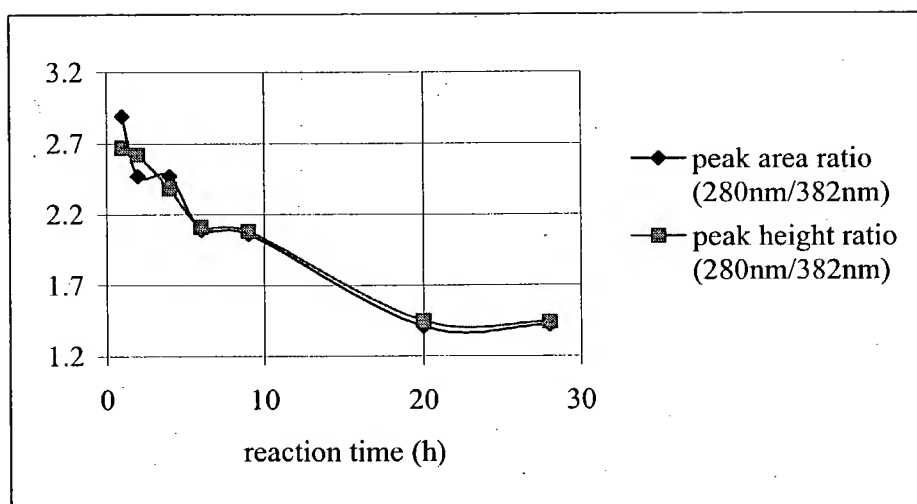


FIG. 9

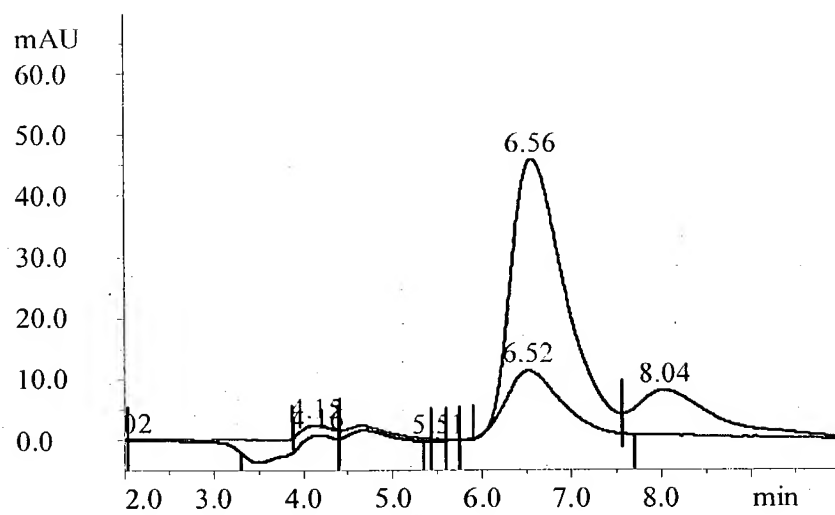


FIG. 10

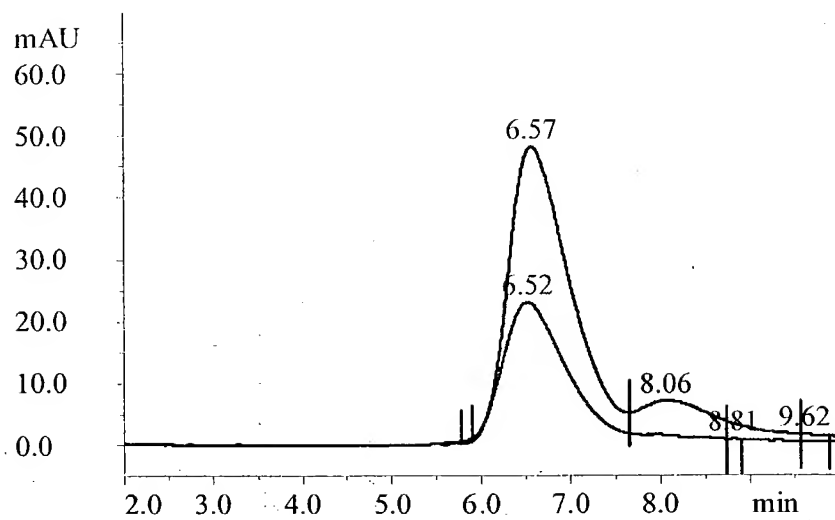


FIG. 11

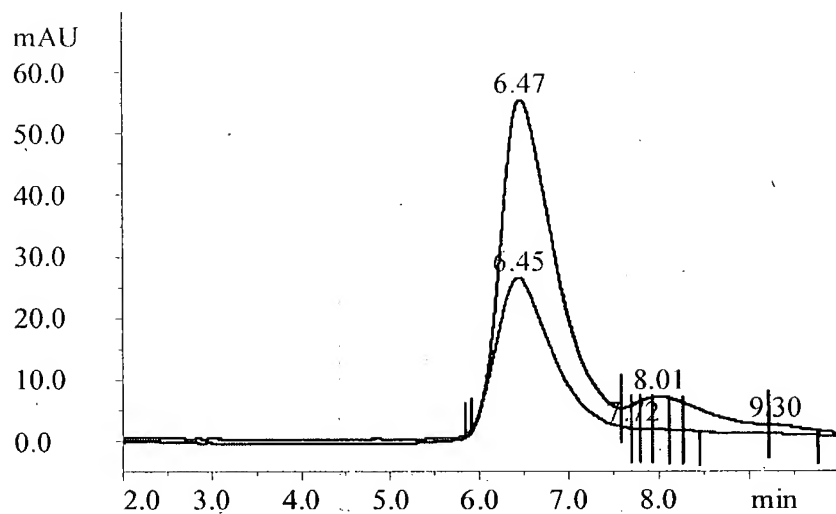


FIG. 12

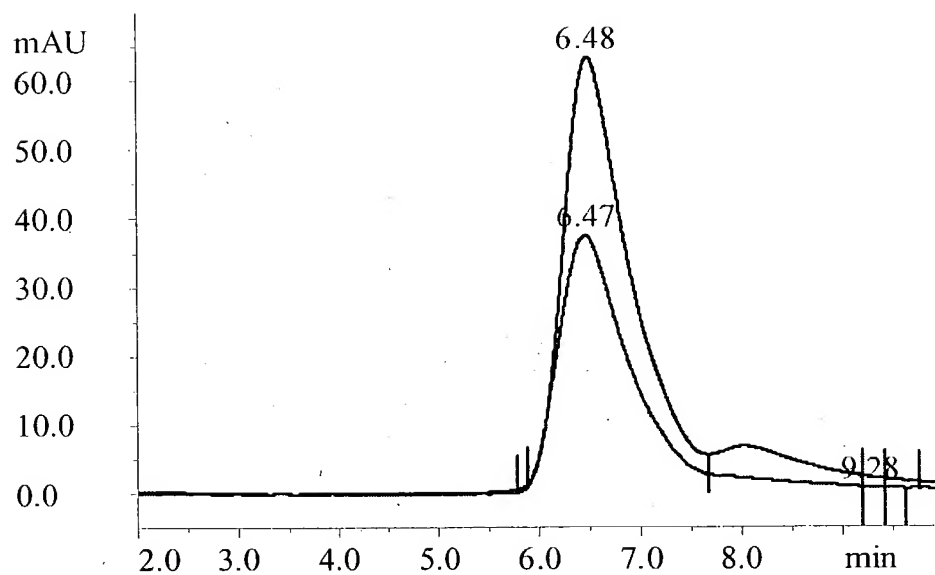


FIG. 13

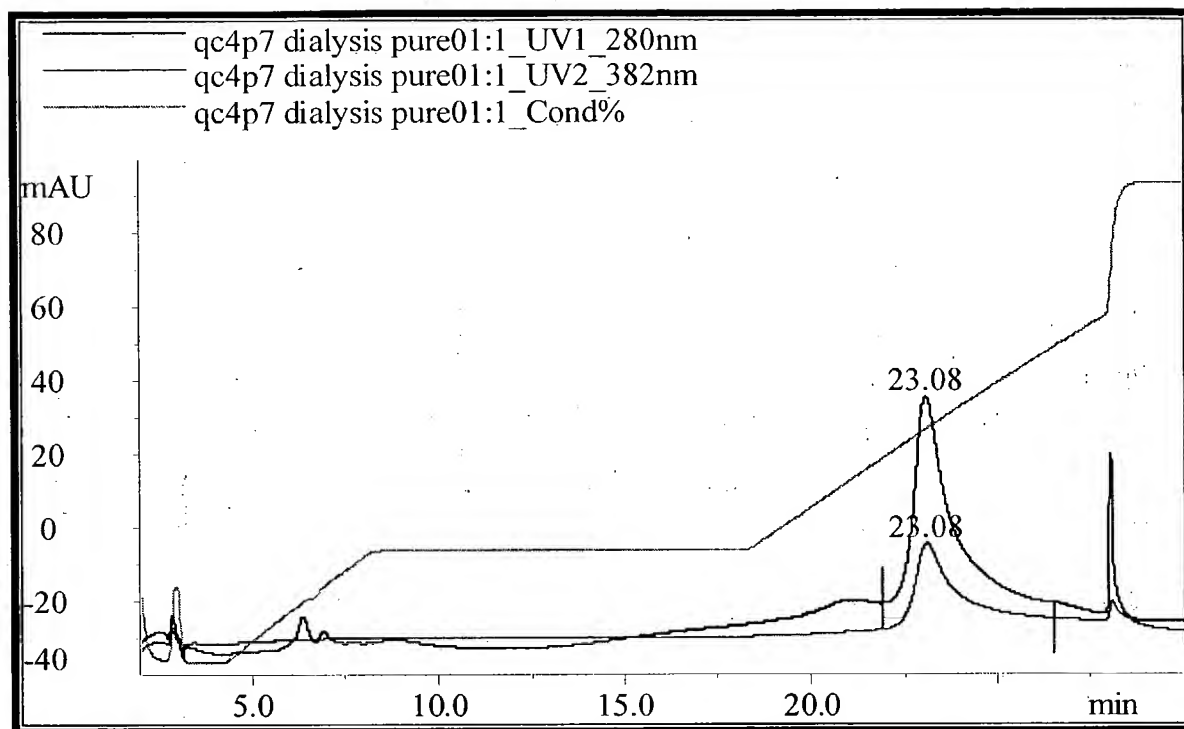


FIG. 14

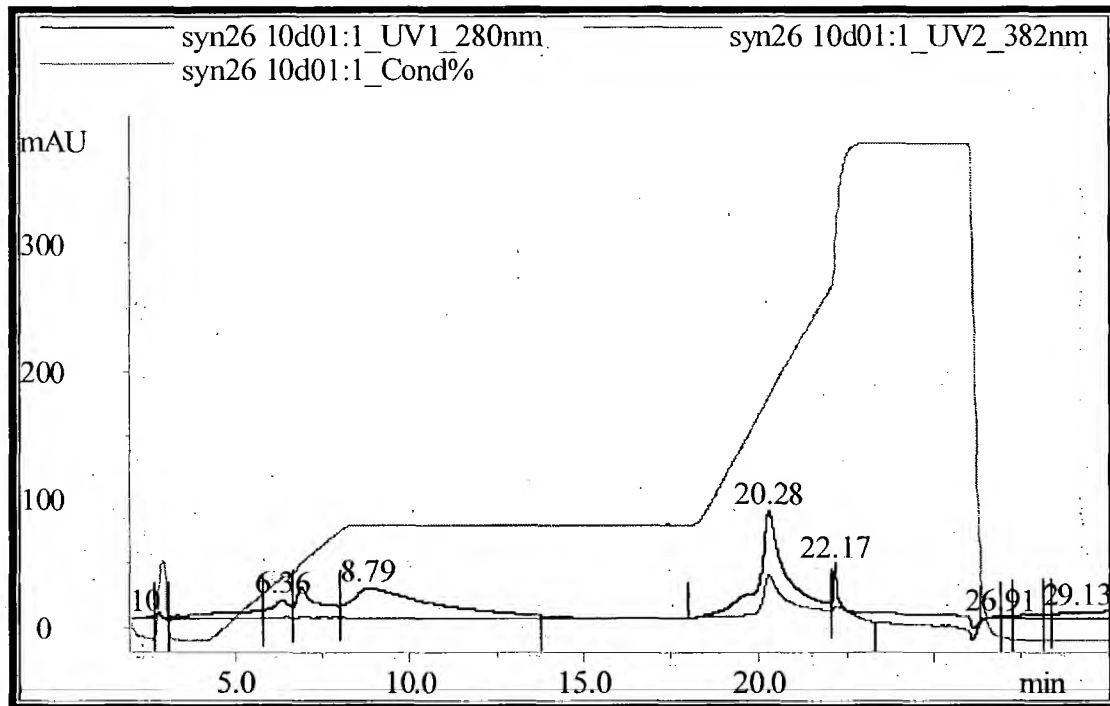


FIG. 15

FIG. 16

sample no: 7028 q.chen qc3p92 /mta
1H dms0-d6

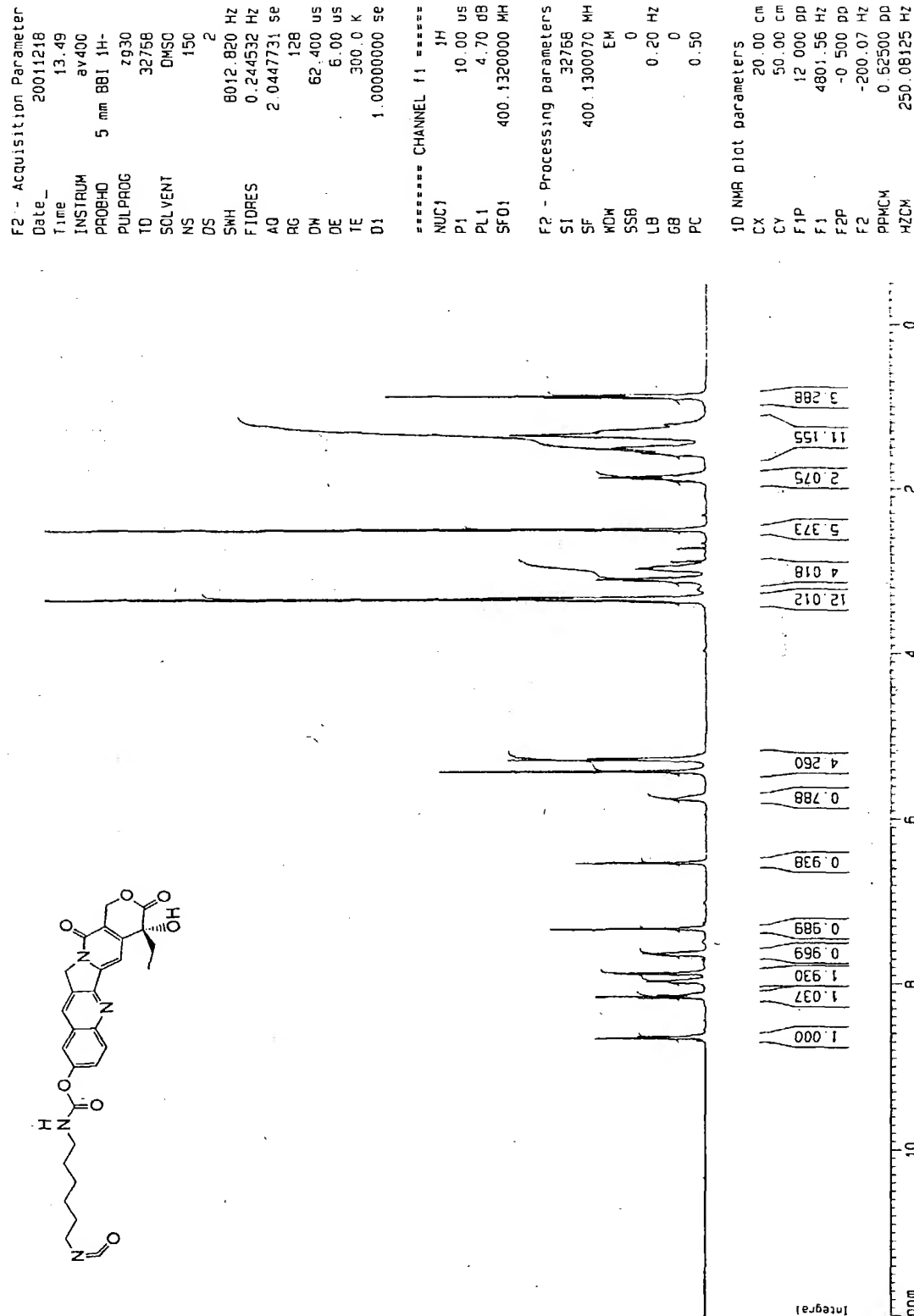
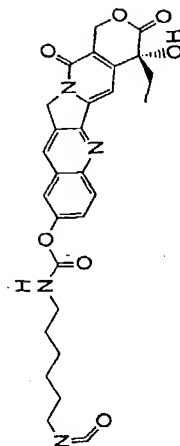
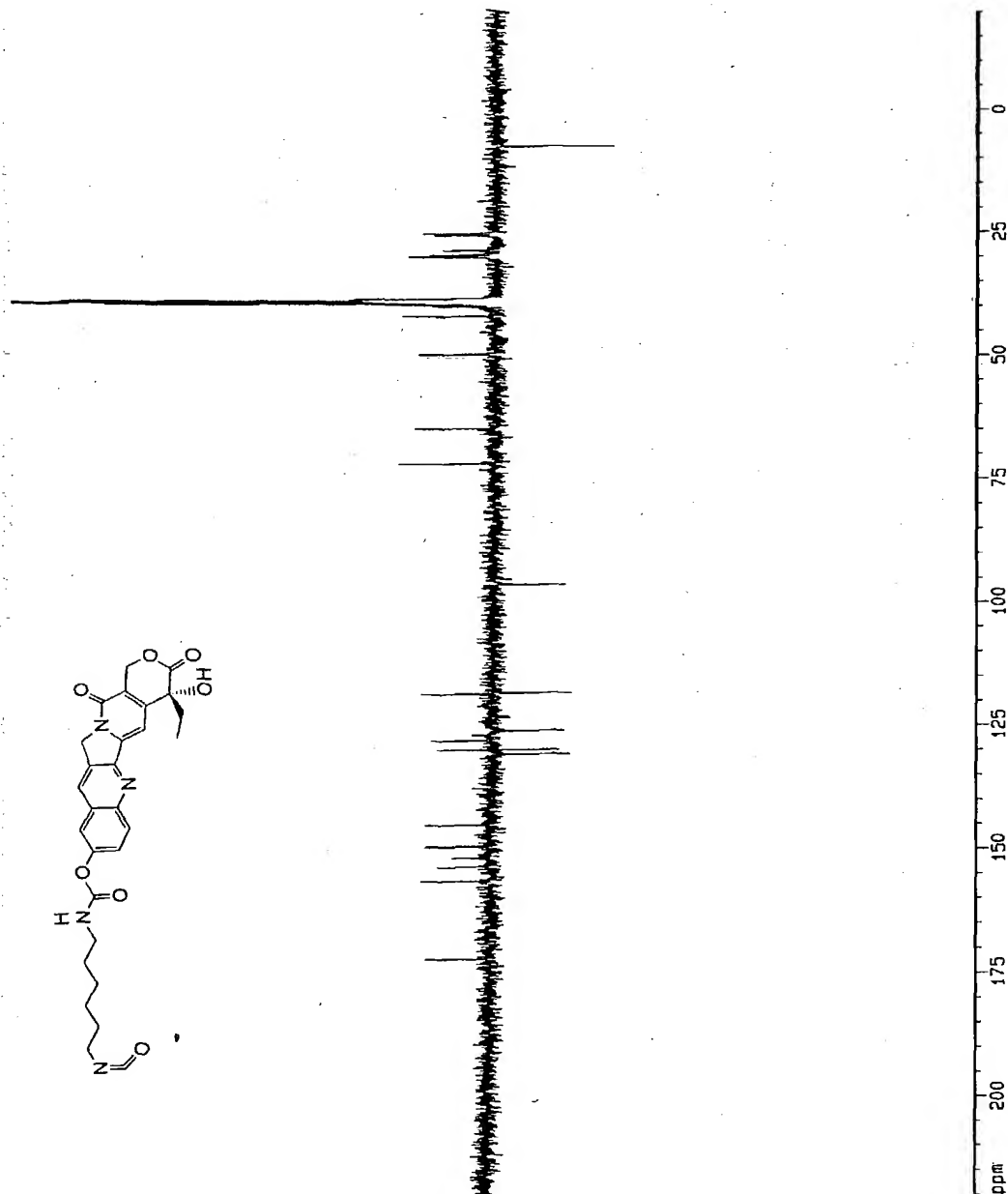
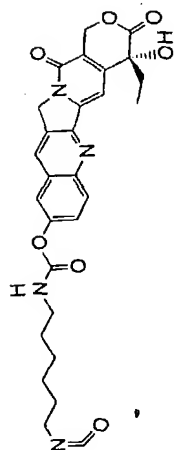


FIG. 17

sample no: 7028 q.chen qc3p92 /mta
13C APT dms0-d6



Current Data Parameters
NAME Chen7028
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20011218
Time 12.10
INSTRUM 84400
PROBHD 5 mm BBI 1H-
PULPROG jmod
TD 32768
SOLVENT DMSO
NS 1670
DS 4
SWH 25062.556 Hz
FIDRES 0.76452 Hz
AQ 0.653716 sec
RG 14595.5
DM 19.950 usec
DE 35.57 usec
TE 300.0 K
CST2 145.000000
CHST11 1.000000
SI 3.0000000 sec
d13 0.0000300 sec
d20 0.0069555 sec
DELTA 0.0001783 sec

***** CHANNEL f1 *****
NUC1 13C
P1 14.00 usec
PL1 3.00 dB
SFO1 100.622730 MHz

***** CHANNEL f2 *****
CPOPRG2 waltz16
NUC2 1H
PCPD2 70.00 usec
PL2 120.00 dB
PL12 17.00 dB
SFO2 400.132000 MHz

F2 - Processing parameters
SI 32768
SF 100.6128172 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
CY 15.00 cm
F1P 220.000 ppm
F1 22134.82 Hz
F2P -20.000 ppm
F2 -2012.25 Hz
PPMCK 12.00000 ppm/cm
VZCM 1207.35388 Hz/cm

Isims15458 Scan 2 (Av 7-9 Acq) 100%=3270 mv 7 Jan 22 13:55
LRP +LSIMS SL11760: QC3P92 * Matrix: Thiolglycerol

FIG. 18

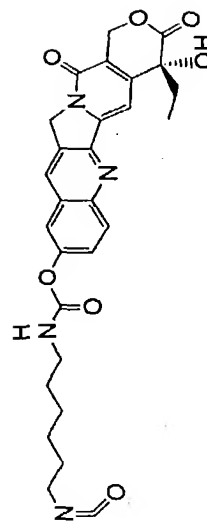
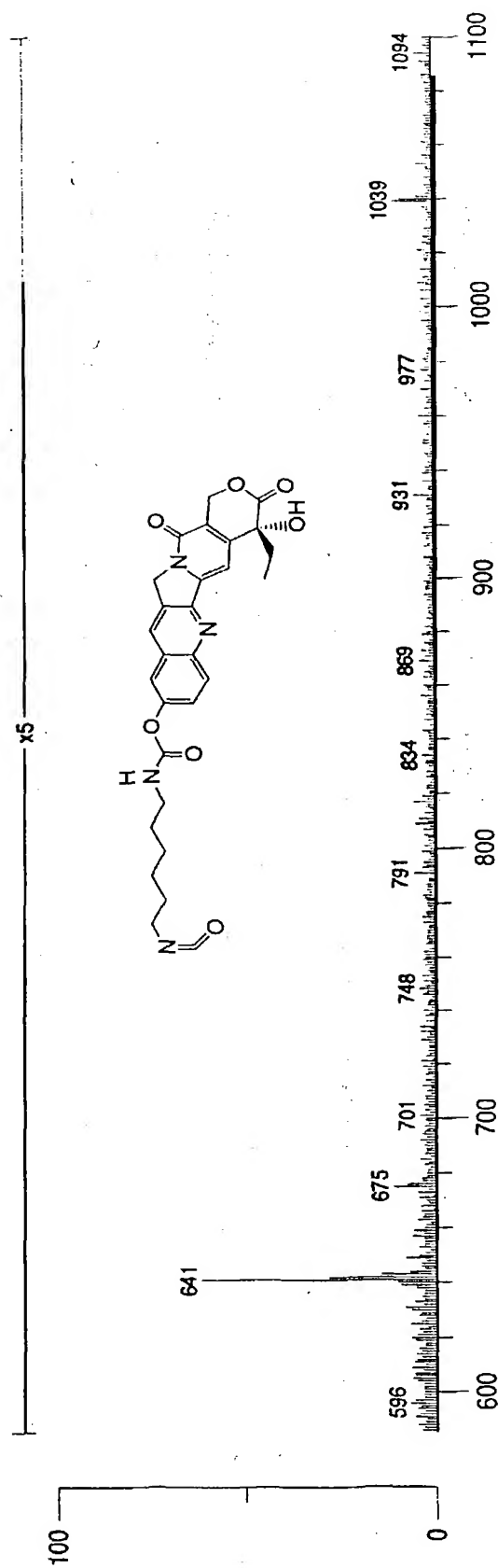
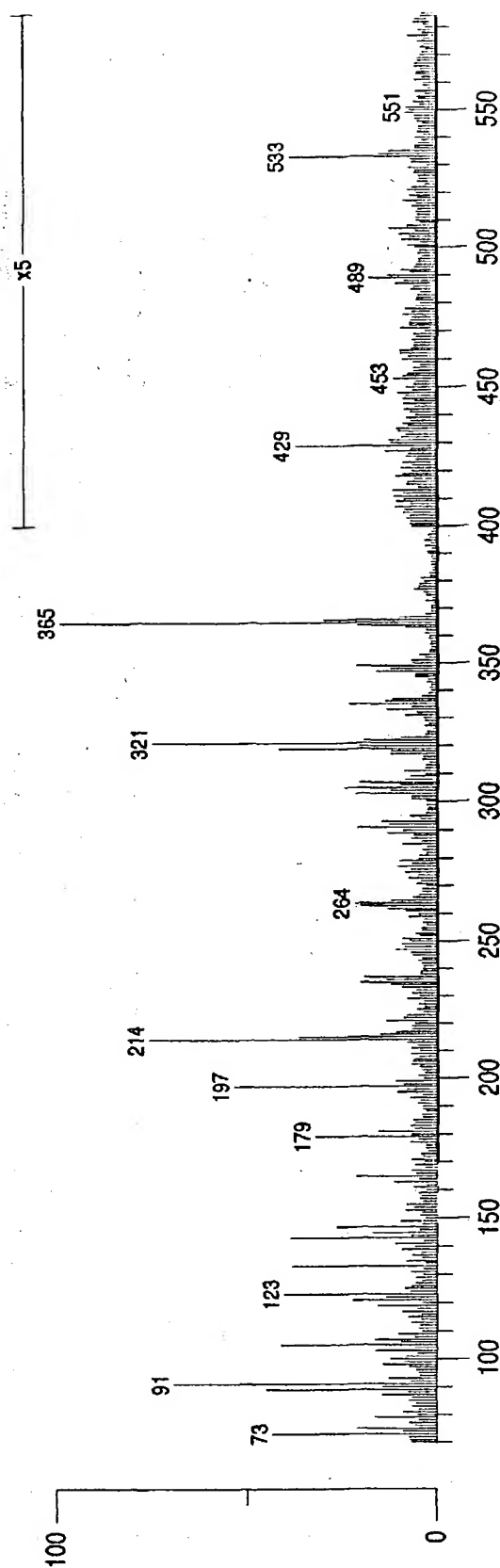
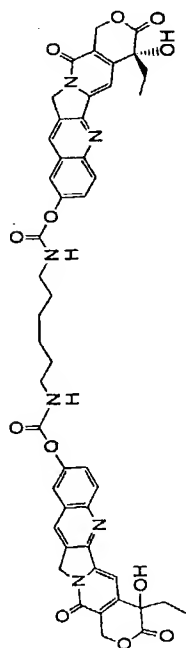
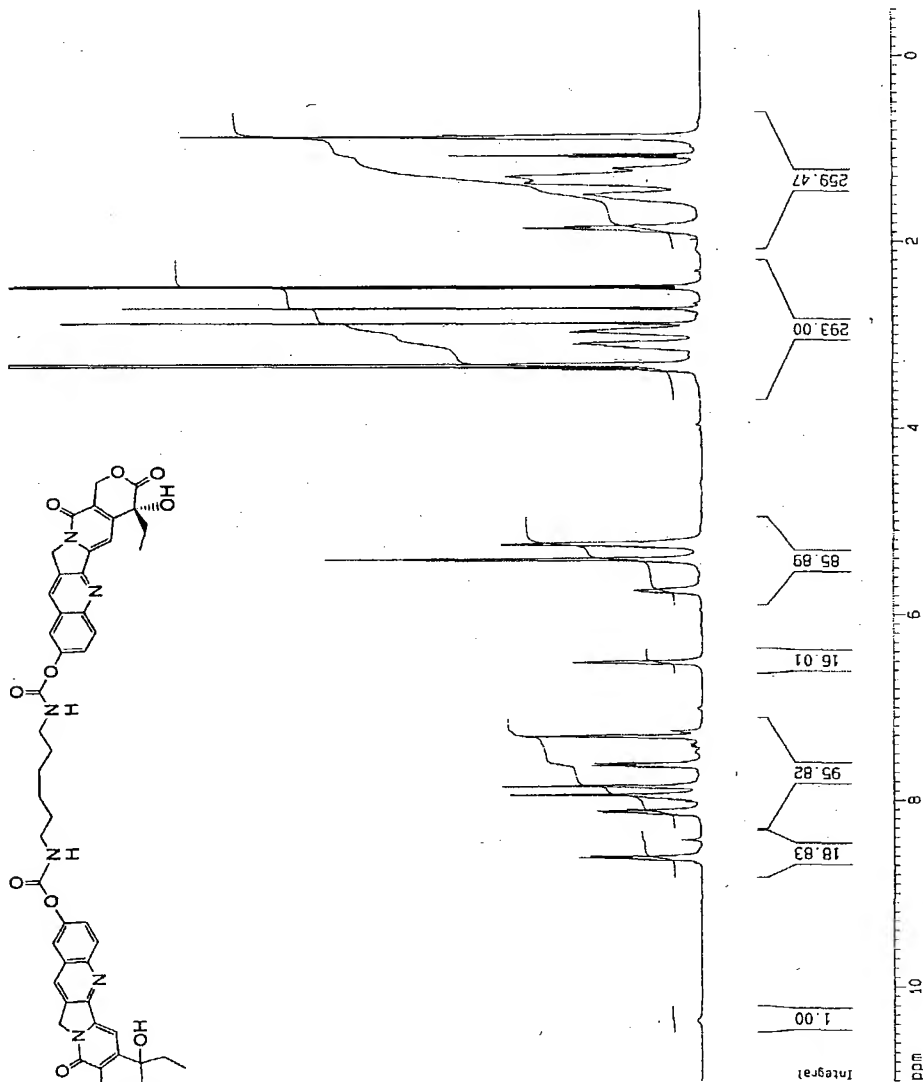


FIG. 19

sample no: 6981 q.chen qc3p83 /mta
¹H dmsO-d6

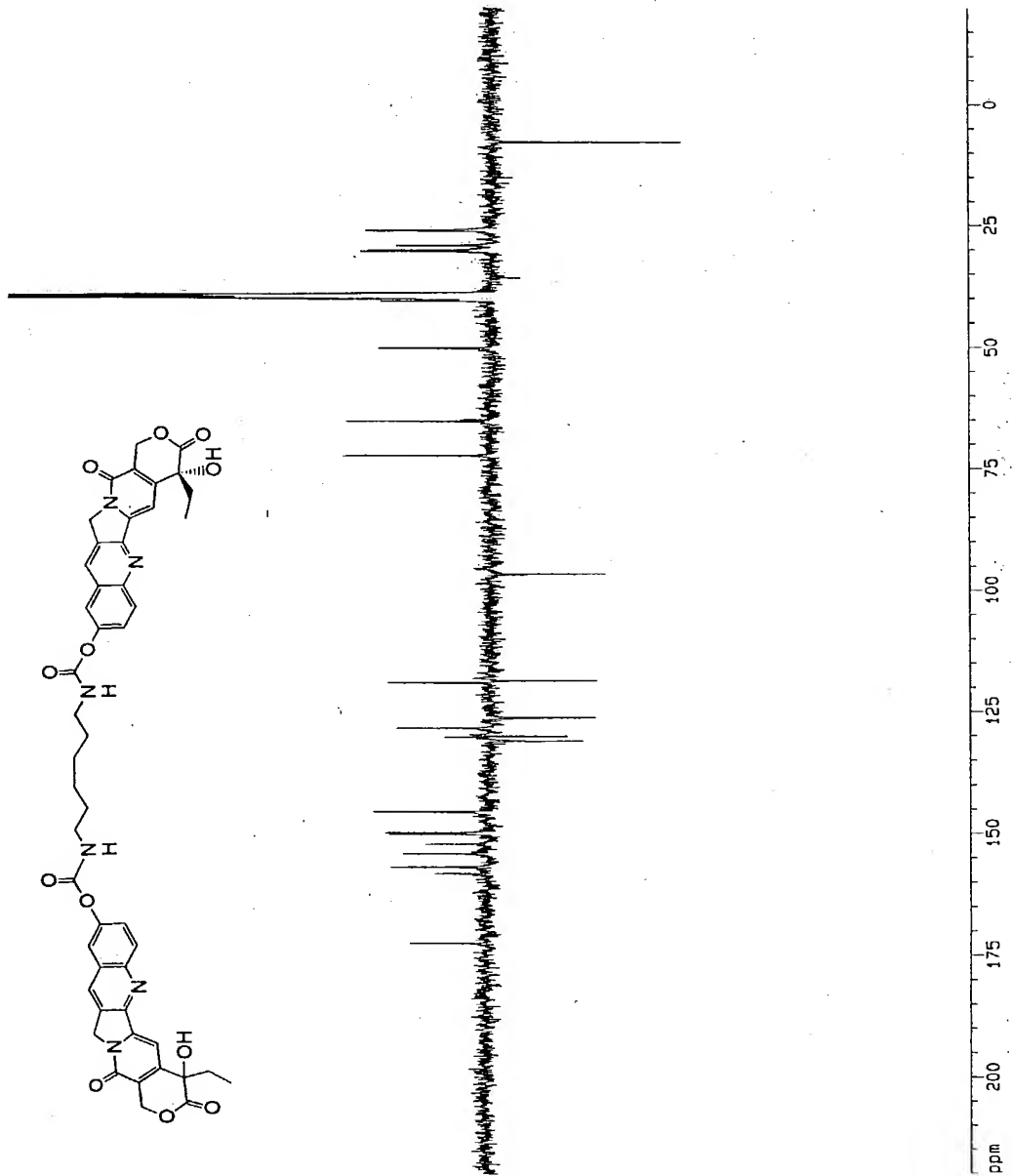


Current Data Parameters
 NAME chen6981
 EXPNO 1
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 20011204
 Time 9.59
 INSTRUM av400
 PROBHD 5 mm BBI 1H-
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 140
 DS 2
 SWH 4990.020 Hz
 FIDRES 0.152283 Hz
 AQ 3.2834036 se
 RG 80.6
 DW 100.200 us
 DE 5.00 us
 TE 300.0 K
 D1 1.00000000 se
 ===== CHANNEL f1 =====
 NUC1 ¹H
 P1 10.00 us
 PL1 4.70 dB
 SFO1 400.1320000 MHz
 F2 - Processing parameters
 SI 32768
 SF 400.1300068 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50
 1D NMR plot parameters
 CX 20.00 cm
 CY 30.00 cm
 F1P 11.000 pp
 F1 4401.43 Hz
 F2P -0.500 pp
 F2 -200.07 Hz
 PPMCM 0.57500 pp
 HZCM 230.07475 Hz



sample no: 6981 q.chen qc3p83 /mta
 13C apt dms0-d6

FIG. 20



Current Data Parameters
 NAME chen6981
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011204
 Time 10.13
 INSTRUM av400
 PROBHD 5 mm BBI 1H-
 PULPROG jmod
 TD 32768
 SOLVENT DMSO
 NS 2730
 DS 4
 SWH 25062.656 Hz
 FIDRES 0.764852 Hz
 AQ 0.6537715 sec
 RG 14596.5
 DW 19.950 usec
 DE 35.57 usec
 TE 300.0 K
 CNST2 145.000000
 CNST11 1.000000
 D1 3.00000000 sec
 d13 0.00000300 sec
 d20 0.00689555 sec
 DELTA 0.00001783 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 14.00 usec
 p2 28.00 usec
 PL1 3.00 dB
 SF01 100.6227250 MHz

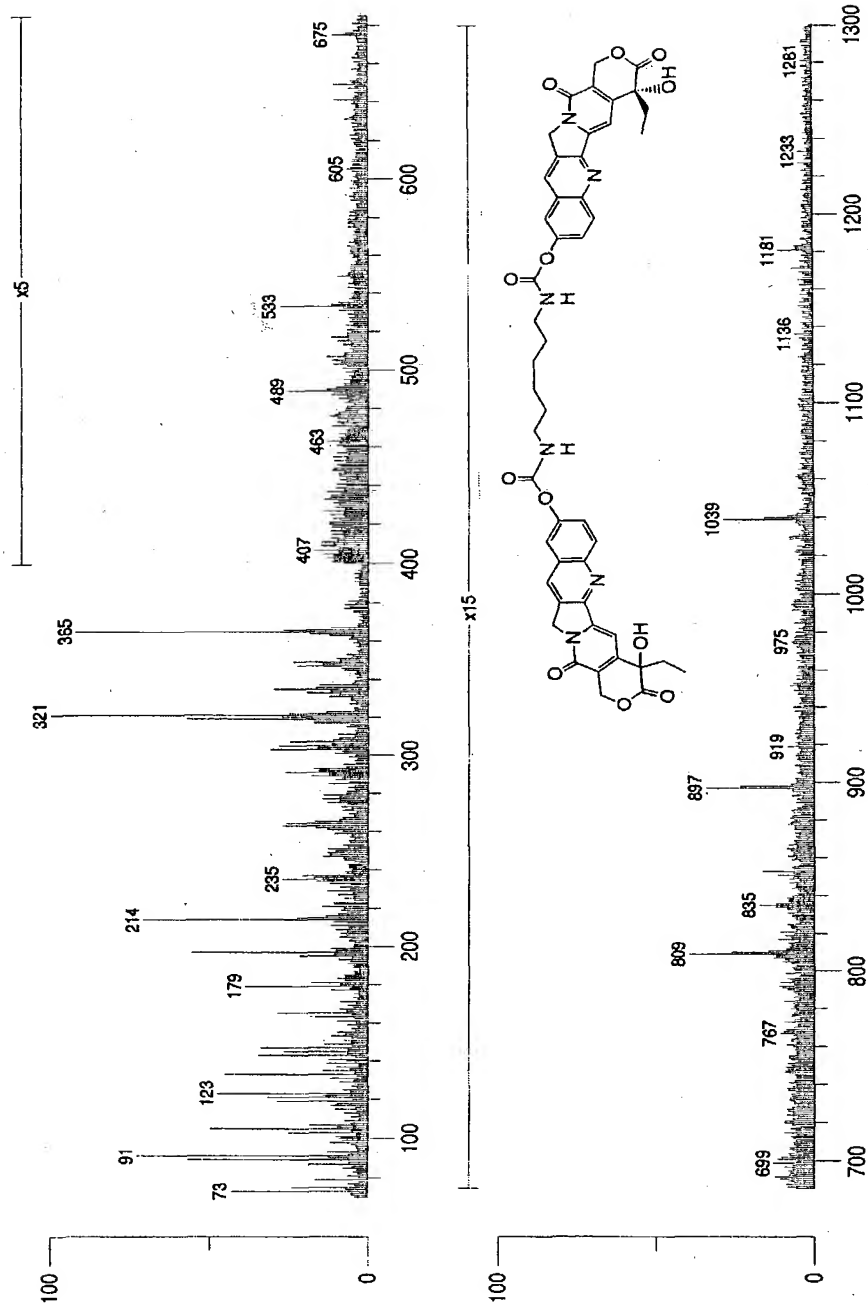
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 70.00 usec
 PL2 120.00 dB
 PL12 21.60 dB
 SF02 400.1320000 MHz

F2 - Processing parameters
 SI 32768
 SF 100.6128203 MHz
 MDW EM
 SSB 0
 LB 5.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 CY 20.00 cm
 F1P 220.000 ppm
 F1 22134.82 Hz
 F2P -20.000 ppm
 F2 -2012.26 Hz
 PPMCH 12.00000 ppm/cm
 HZCH 1207.35400 Hz/cm

FIG. 21

Isims15379 Scan 1 (Av 19.25 Acq) 100%-4667 mv 3 Dec 11 12:46
LRP +LSIMS SL11738: QC3P83 * Matrix: Thioglycerol



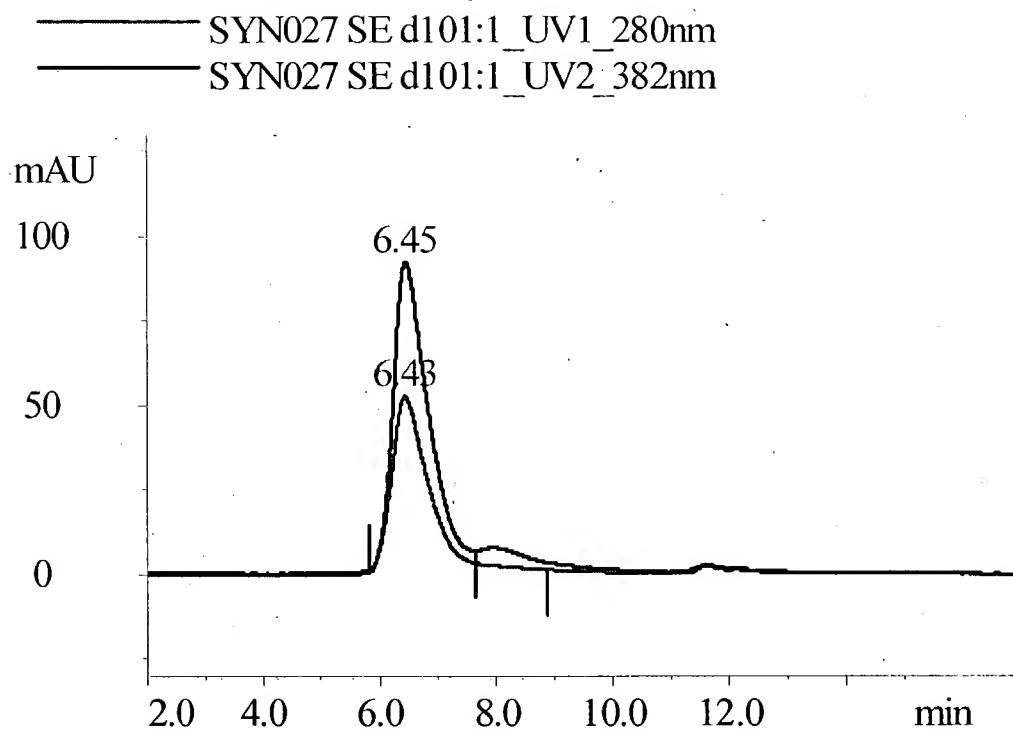


FIG. 22

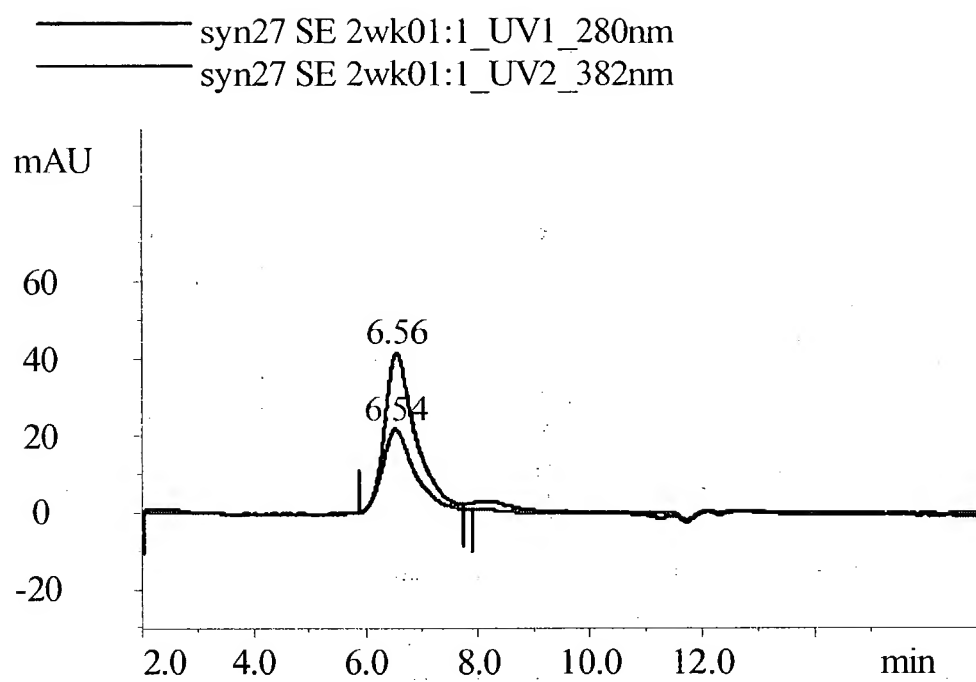
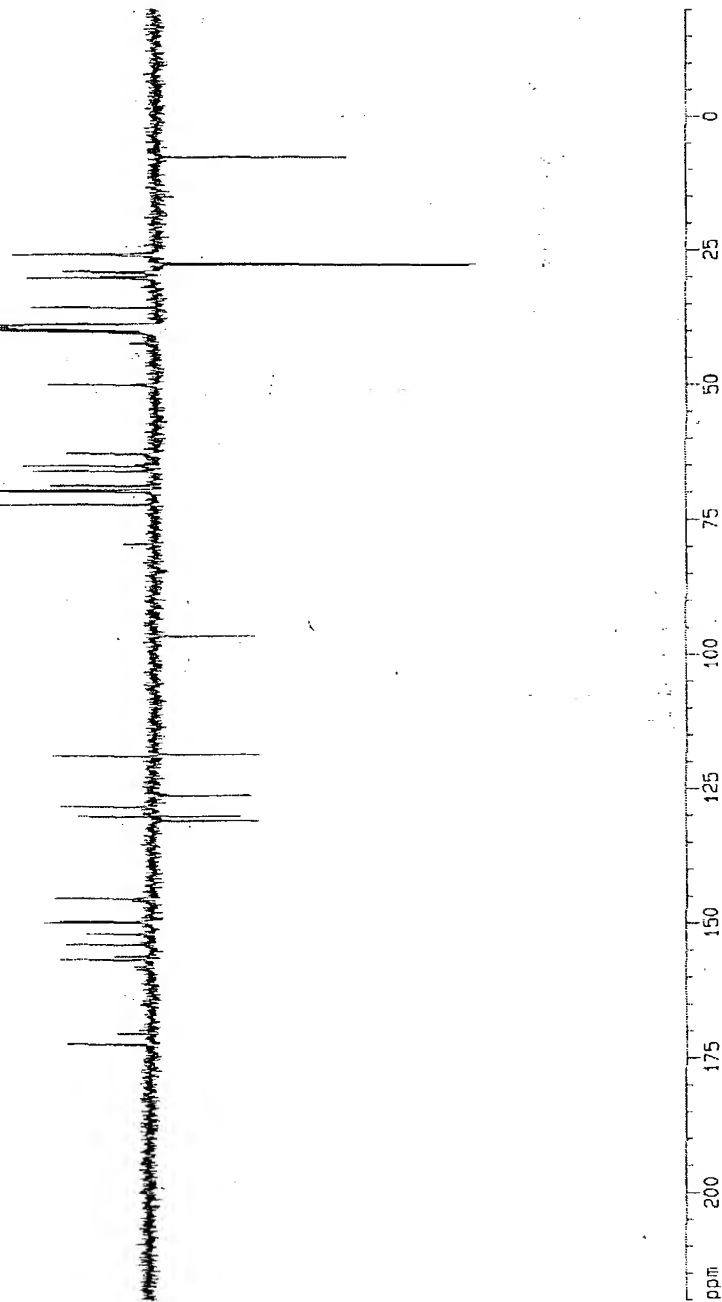
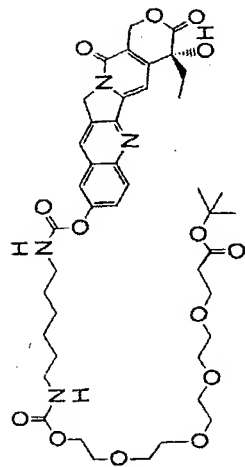


FIG. 23

FIG. 24

sample no: 7027 q.chen qcp91 /mta
 13C APT dms0-d6



Current Data Parameters
 NAME chen7027
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011218
 Time 9.21
 INSTRUM av400
 PROBHD 5 mm BBI 1H-
 PULPROG zgpg30
 TO 32768
 SOLVENT DMSO
 NS 2570
 DS 4
 SWH 25062.656 Hz
 FIDRES 0.764852 Hz
 AQ 0.6537716 sec
 RG 23170.5
 DW 19.950 usec
 DE 35.57 usec
 TE 300.0 K

===== CHANNEL f1 =====
 NUC1 13C
 P1 14.00 usec
 PL1 3.00 dB
 SF01 100.6227230 MHz

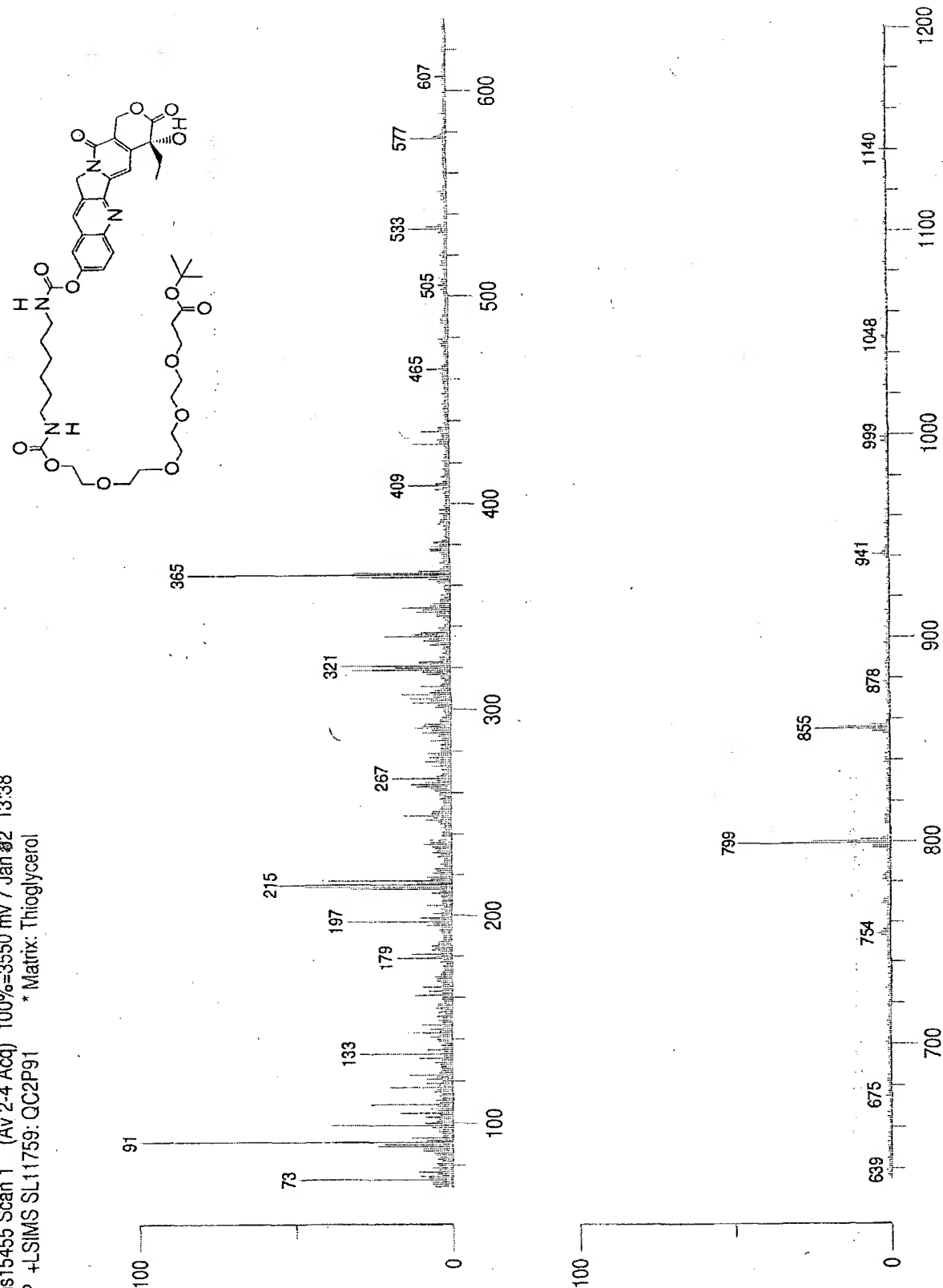
===== CHANNEL f2 =====
 NUC2 1H
 P2 70.00 usec
 PL2 120.00 dB
 PL12 17.00 dB
 SF02 400.1320030 MHz

F2 - Processing Parameters
 SI 32768
 SF 100.6126172 MHz
 EN 0
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 CY 15.00 cm
 F1P 220.000 ppm
 F1 22134.82 Hz
 F2P -20.000 ppm
 F2 -2012.25 Hz
 PPMCM 12.0000 ppm/cm
 HZCM 1207.35308 Hz/cm

FIG. 25

Isims15455 Scan 1 (Av 2-4 Acq) 100%=3550 mv 7 Jan 02 13:38
LRP +LSIMS SL11759: QC2P91 * Matrix: Thioglycerol



Chemical structure of 10-CPT-carbamato-hexyl-PEG4-t-butyl-ester is shown in the upper right corner of the plot area.

Peak list (1/cm):

Wavenumber (1/cm)
3313.5
2929.7
2860.2
1718.5
1654.8
1600.8
1541.0
1498.6
1446.5
1348.1
1151.4
1226.6
1195.8
1103.2
1043.4
1001.0
916.1
835.1
800.4
759.9
592.1
524.6

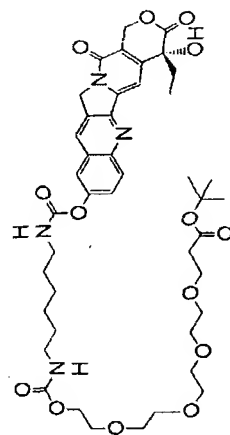
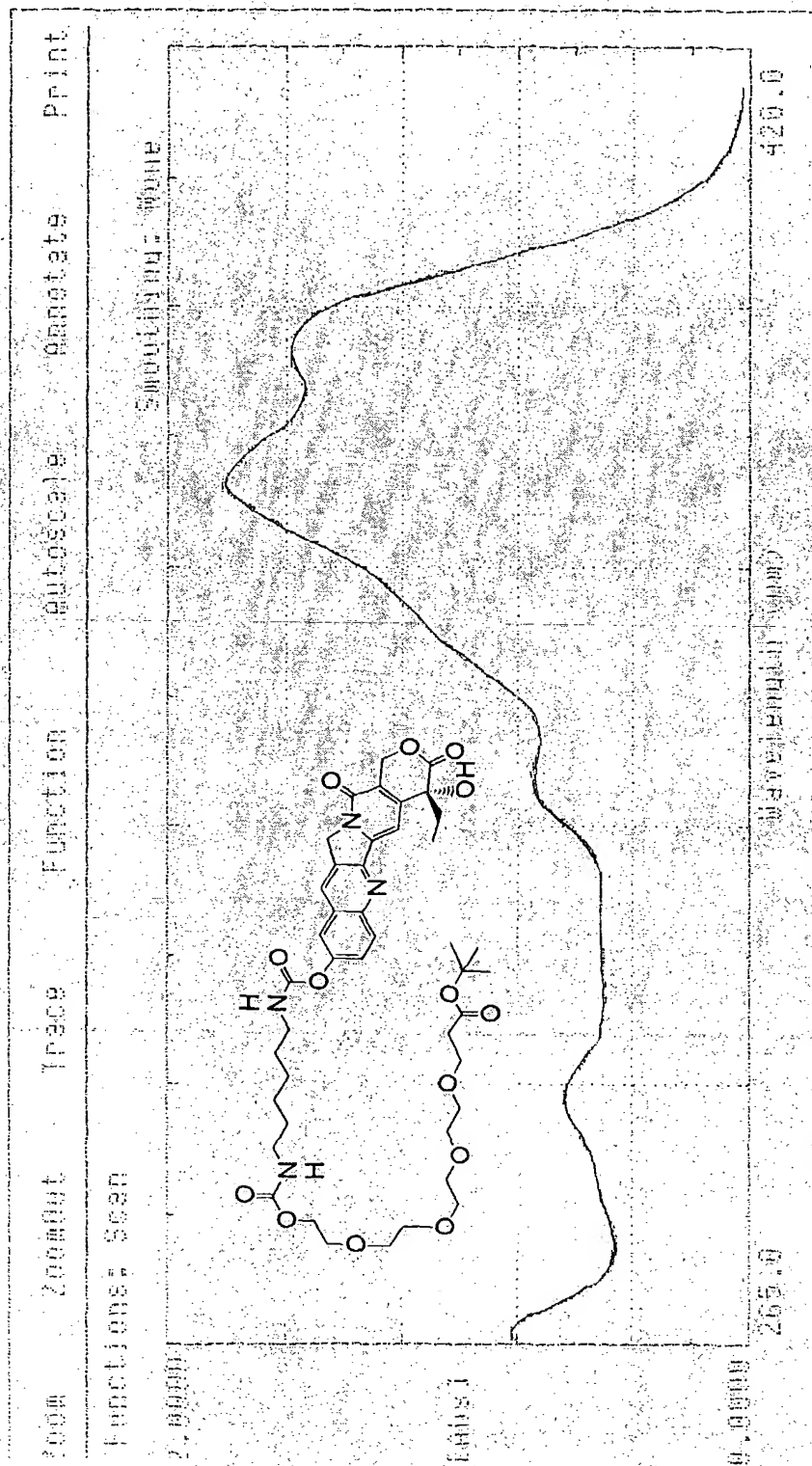


FIG. 27

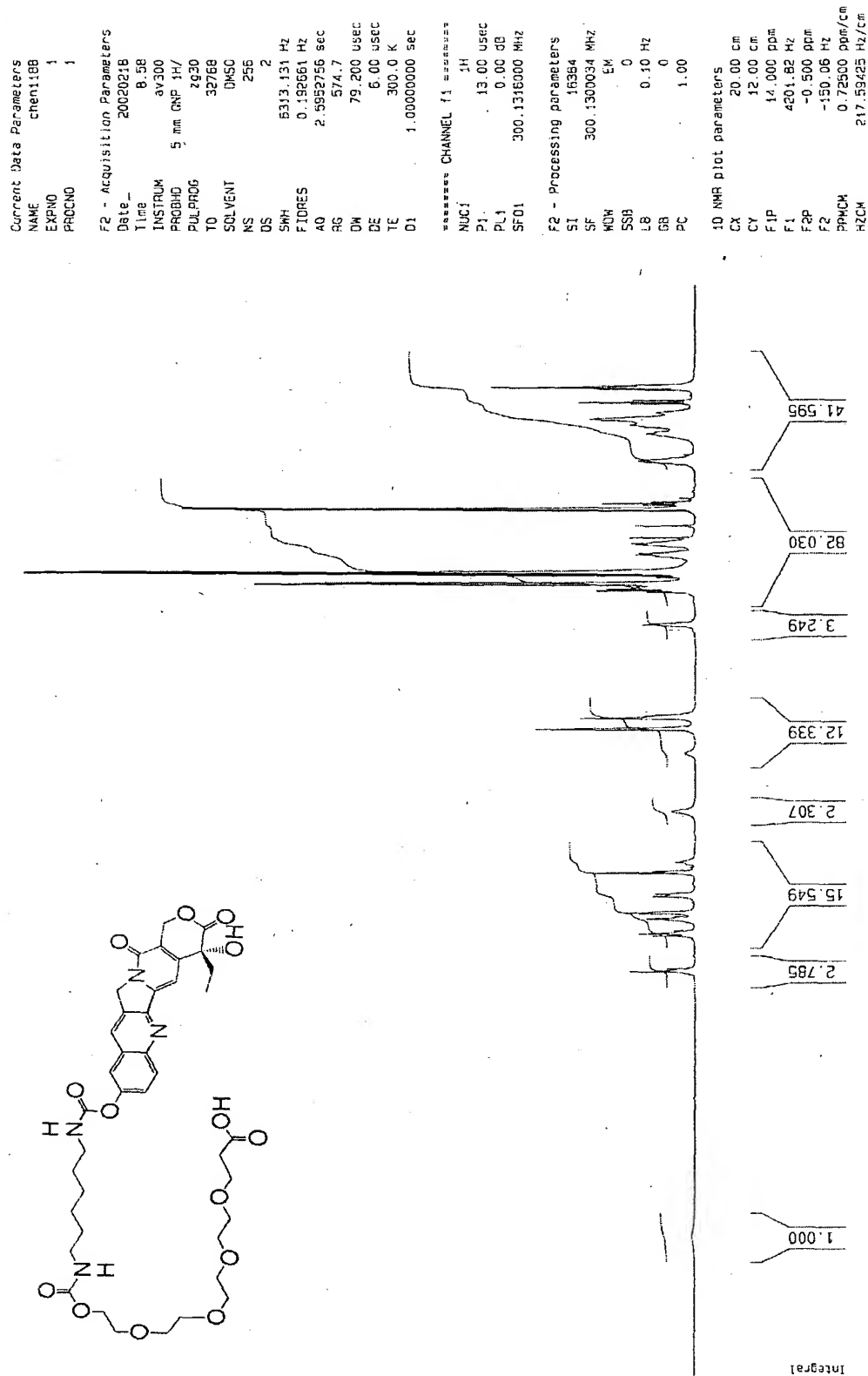
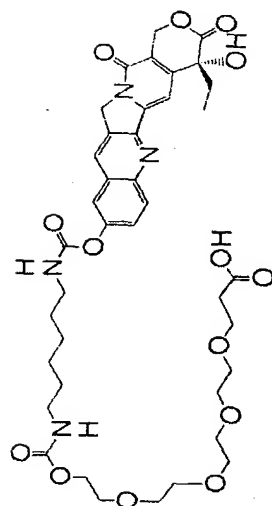
007 PG 14492979

03/17/02
03/17/02
03/17/02

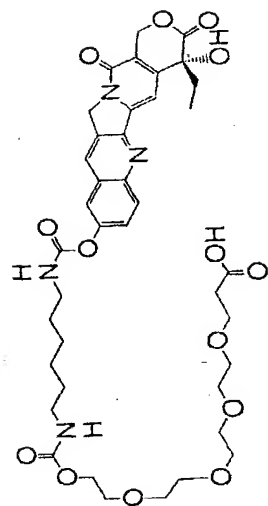


sample no: 1188 q.chen qc4p18 /mta
 1H dms0-d6

FIG. 28



sample no: 1188 q.chen qc4p18 /mta **FIG. 29**
 13C bb dms0-d6



```

Current Data Parameters
NAME      chen1188
EXPNO     2
PROCNO    1

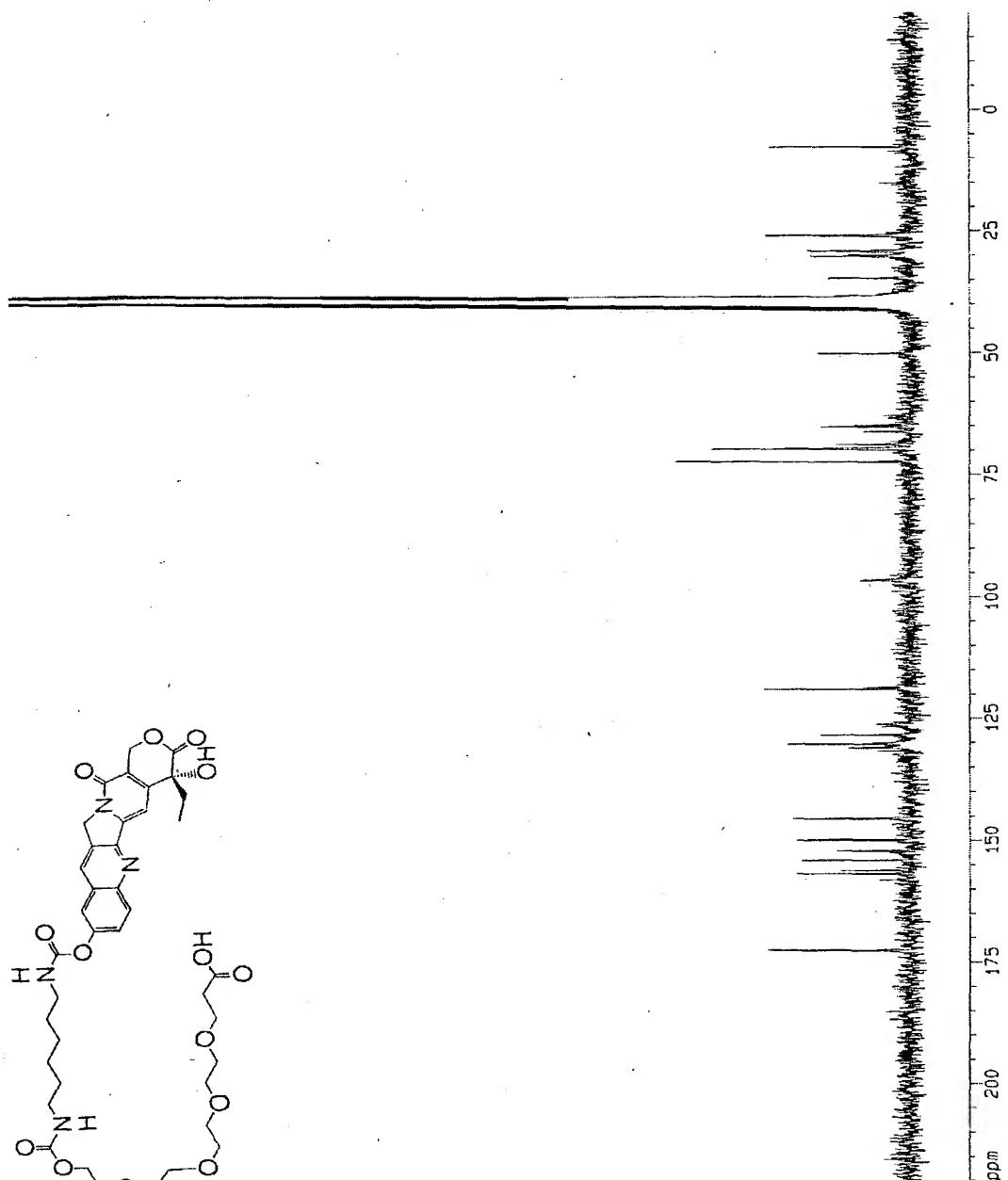
F2 - Acquisition Parameters
Date_     20020220
Time      15:21
INSTRUM   AV300
PROBHD    5 mm QNP 1H/
PULPROG   zgpg30
TD         65536
SOLVENT   DMSO
NS         15360
DS         4
SWH        18832.393 Hz
FIDRES     0.287360 Hz
AQ         1.7400308 sec
RG          16384
DM         26.550 usec
DE         37.53 usec
TE         300.0 K
D1         1.00000000 sec
d11        0.03000000 sec
d12        0.00020000 sec

===== CHANNEL f1 =====
NUC1       13C
P1         10.00 usec
PL1        0.00 dB
SFO1       75.475190 MHz

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2       1H
PCPD2      80.00 usec
PL2        120.00 dB
PL12       14.00 dB
PL13       14.00 dB
SFO2       300.1312005 MHz

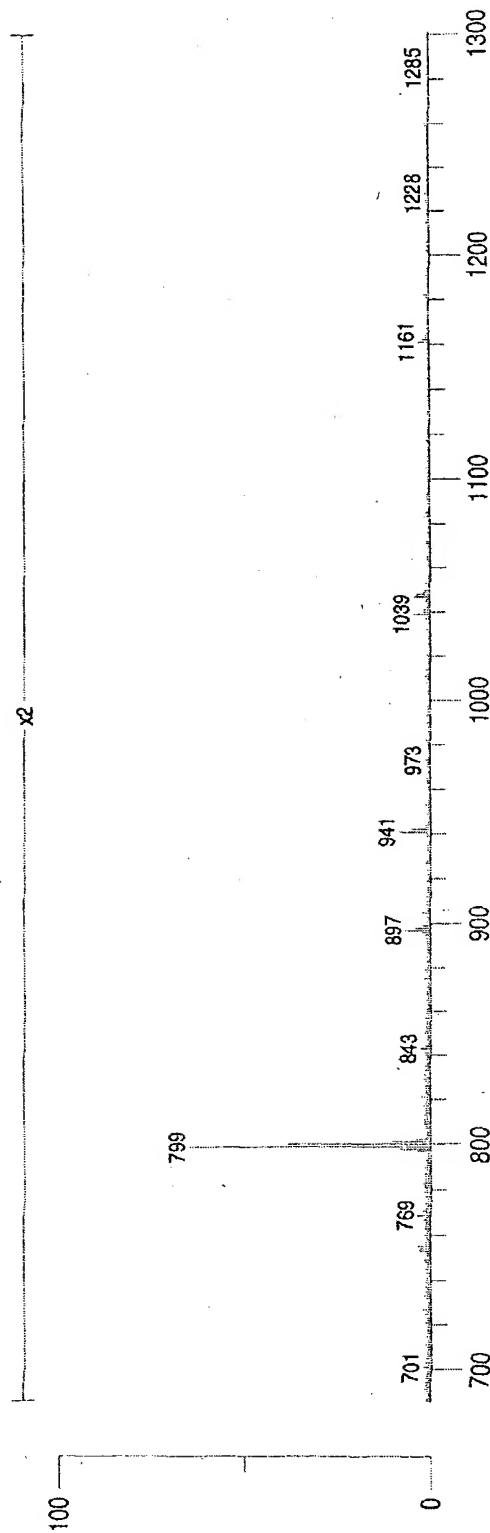
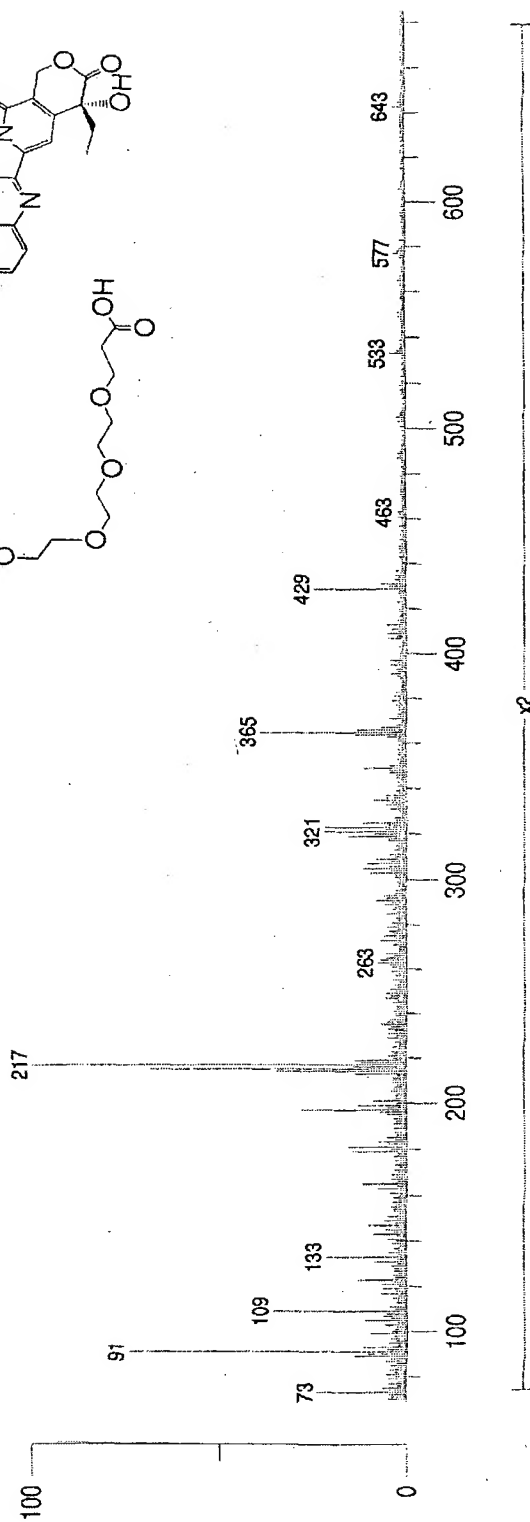
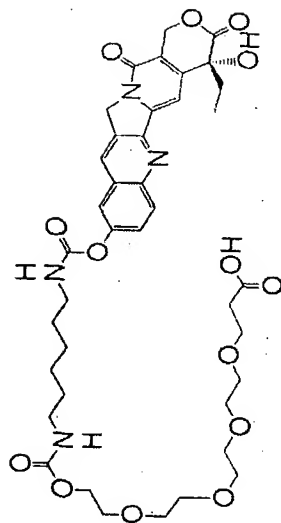
F2 - Processing parameters
SI         32768
SF         75.4677845 MHz
WDW        EM
SSB        0
LB         3.00 Hz
GB         0
PC         1.00

1D NMR plot parameters
CX         20.00 cm
CY         200.00 cm
FIP        220.000 ppm
F1         16602.91 Hz
F2         -20.000 ppm
F20        -1509.36 Hz
PQNMCH     12.00000 ppm/cm
HZCM       905.61340 Hz/cm
  
```



Isims15766 Scan 1 (Av 6-10 Acq) 100%-5585 mv 15 Feb 02 9:28
 LRP +LSIMS SL11894: QC4P18 * Matrix: Thioglycerol

FIG. 30



Chemical structure of acid-PEG4-cbm-hexyl-cbm-10CPT-qc4p18 is shown in the upper right corner of the plot area.

Key peaks labeled on the spectrum (Wavenumber in cm^{-1}):

- 3311.5
- 2858.3
- 1730.0
- 1654.8
- 1600.8
- 1539.1
- 1498.6
- 1442.7
- 1348.1
- 1195.8
- 1151.4
- 1103.2
- 1043.4
- 1001.0
- 914.2
- 833.2
- 513.0
- 528.5
- 555.5
- 594.0

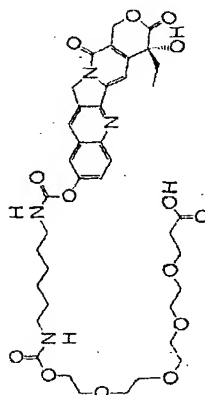


FIG. 32

DECKMAN DU 600

Date: 05/17/02
Time: 10:54

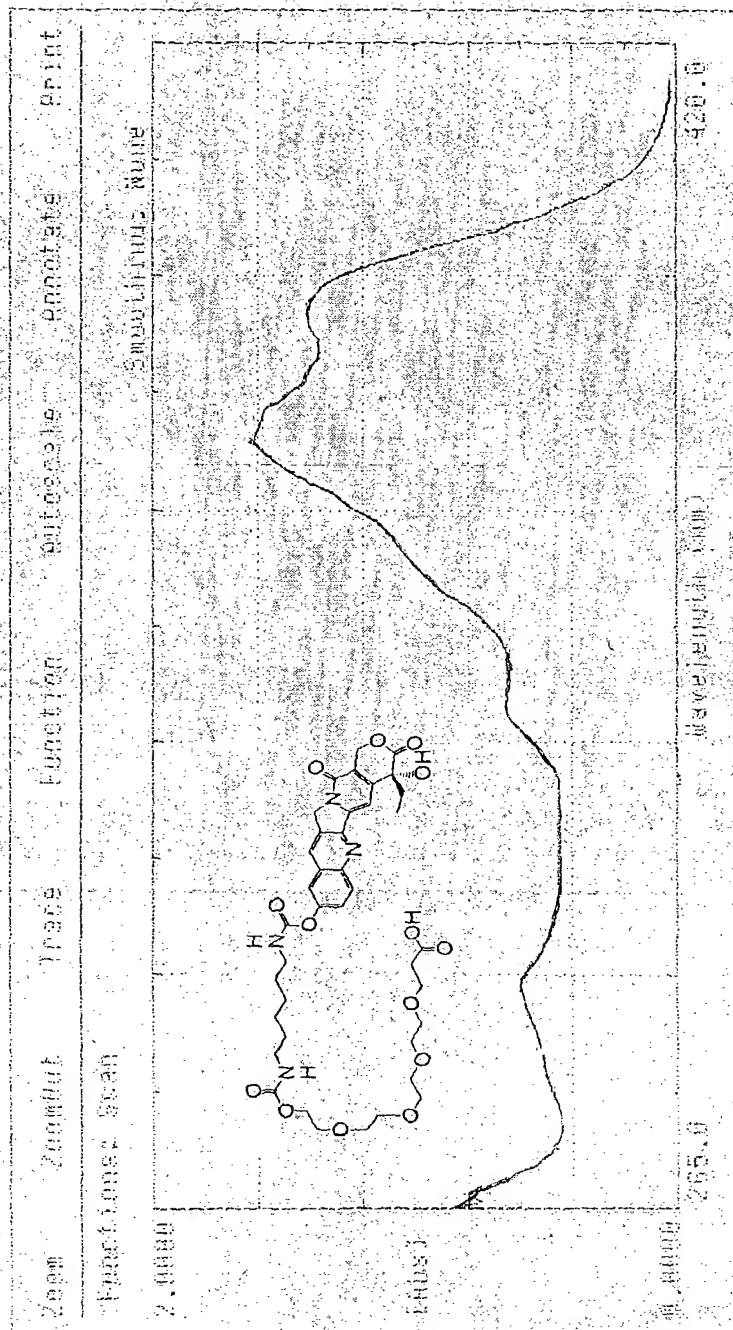


FIG. 33

JOB NO: 1776 0 CHEN QC4P64
qc1776 1 1

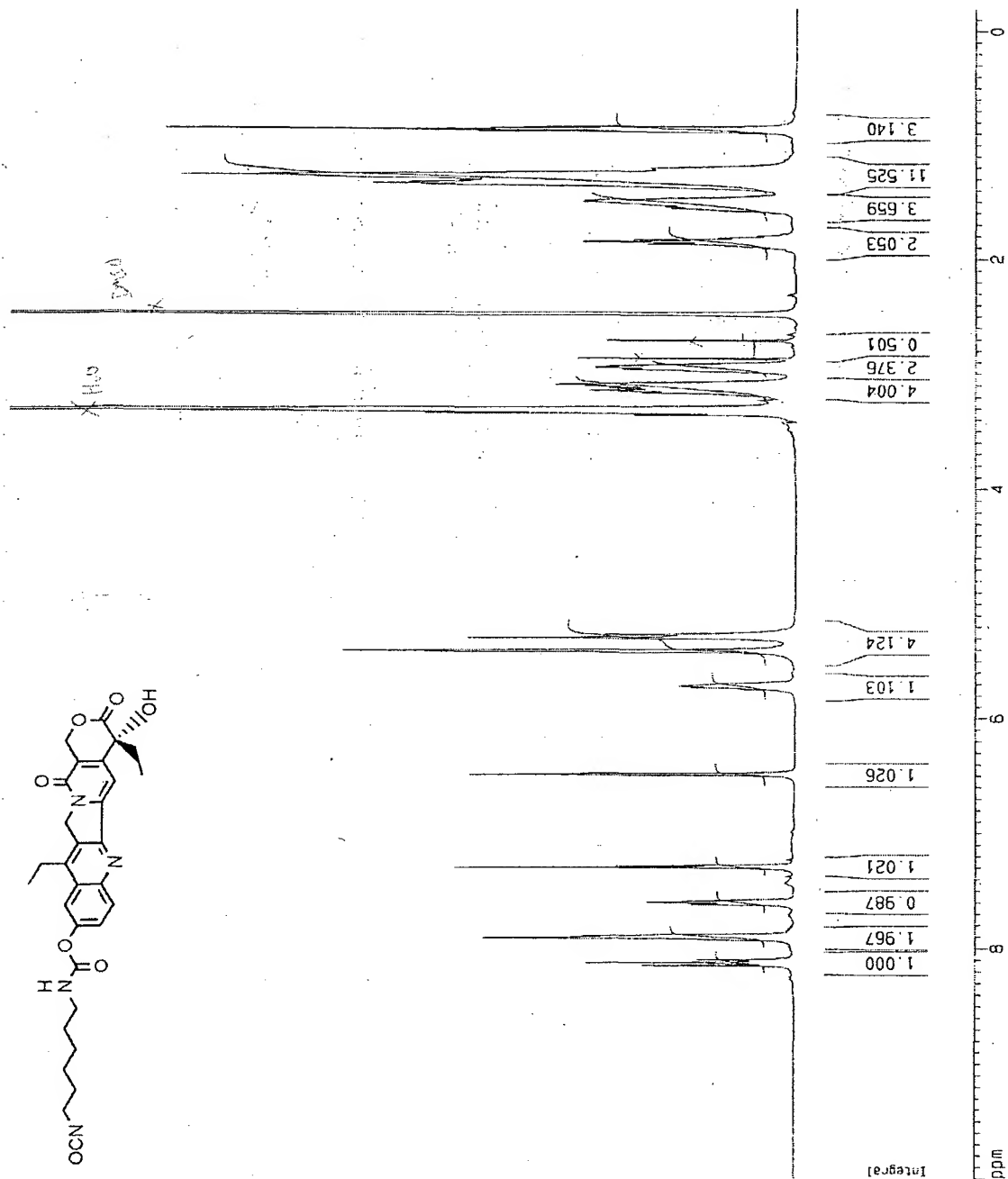
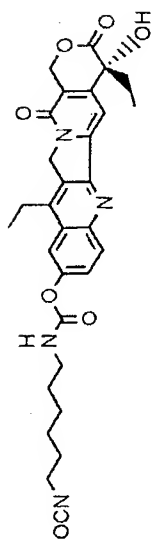
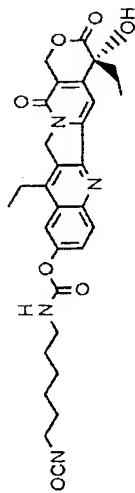


FIG. 34

JOB NO: 1776 Q CHEN QC4P64
qc1776 2 1 jmod expt



Current Data Parameters
NAME qc1776
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20020607
Time 10.37
INSTRUM av400
PROBHD 5 mm BBI 1H-
PULPROG jmod
TD 16384
SOLVENT DMSO
NS 6250
DS 4
SWH 25062.656 Hz
FIDRES 1.324703 Hz
AQ 0.3263108 sec
RG 20542.5
DM 19.950 usec
DE 35.37 usec
TE 300.0 K
CNS12 145.000000
CNS11 1.000000
D1 1.00000000 sec
d13 0.00000000 sec
d20 0.00000000 sec
DELTA 0.0001783 sec

===== CHANNEL f1 =====
NUC1 13C
P1 14.00 usec
d2 28.00 usec
PL1 -3.00 dB
SF01 100.622750 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 70.00 usec
PL2 120.00 dB
PL12 21.00 dB
SF02 400.132000 MHz

F2 - Processing parameters
SI 32768
SF 100.6129189 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 0.50

1D NMR plot parameters
CX 20.00 cm
CY 0.00 cm
FIP 220.000 ppm
F1 22134.82 Hz
F2 -10.000 ppm
F2 -1006.13 Hz
PPMCM 11.50000 ppm/cm
HZCM 1157.04743 Hz/cm

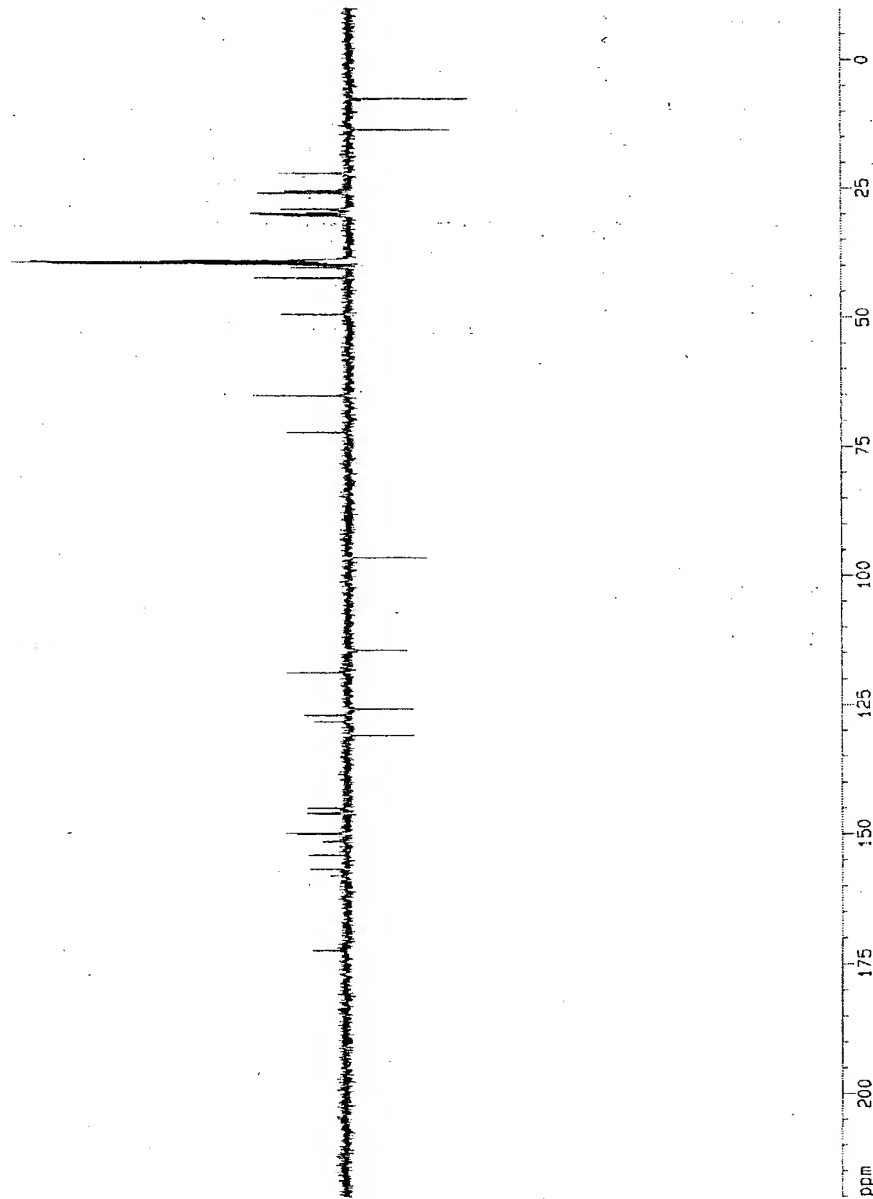
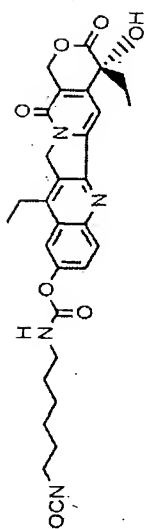


FIG. 35



Isims16301 Scan 1 (Av 16-20 Acq) 100%=7600 mv 14 Jun 82 10:44
LFP +LSIMS SL12057: QC4P64 * Matrix: Glycerol

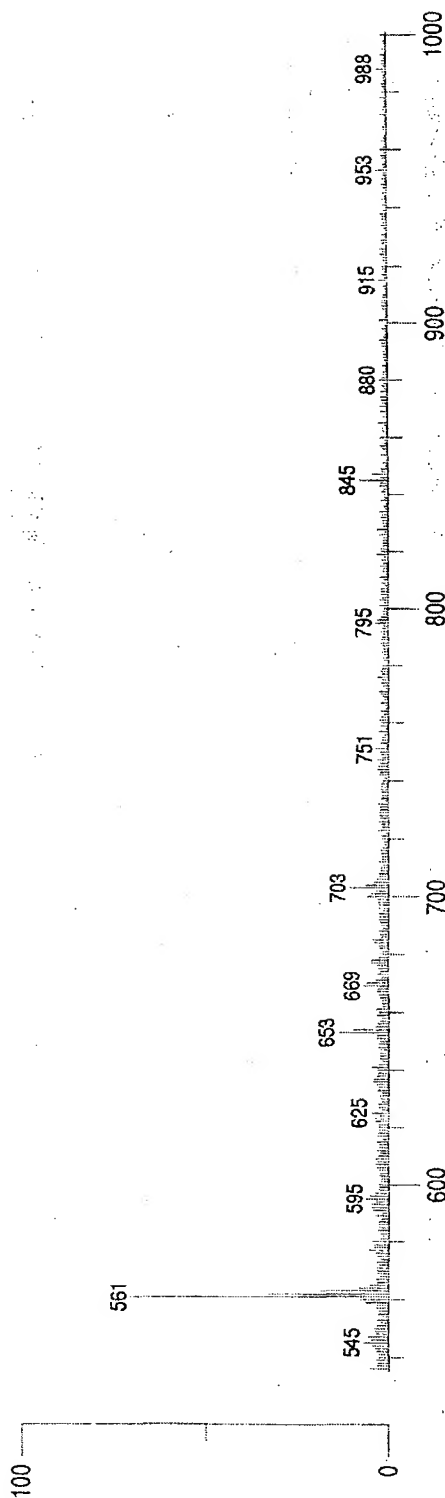
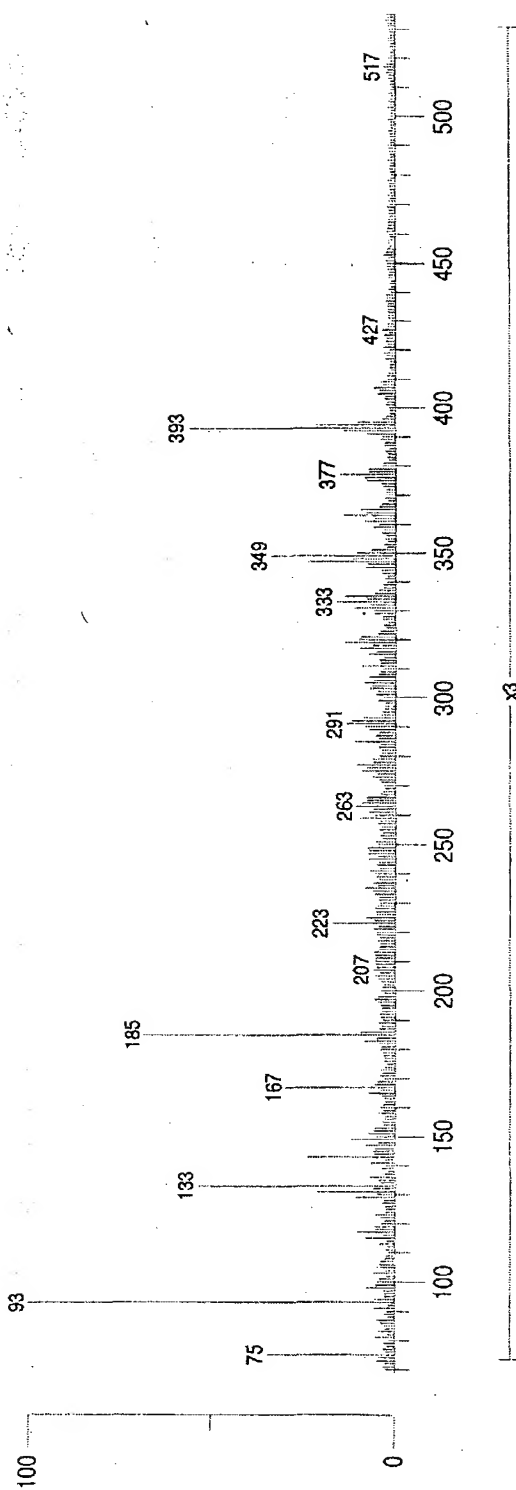


FIG. 36

